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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/587,977	06/06/00	KETTUNEN	A 10-1310

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IM22/0605

EXAMINER

NGUYEN, T

ART UNIT	PAPER NUMBER
1731	7

DATE MAILED: 06/05/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
**09/587,977**

Applicant(s)

**KETTUNEN et al**

Examiner

**Dean T. Nguyen**

Art Unit

**1731**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1) ☒ Responsive to communication(s) filed on Mar 26, 2001

2a) ☐ This action is **FINAL**.

2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

## Disposition of Claims

4) ☒ Claim(s) 13-15 and 21-24 is/are pending in the applica

4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from considera

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 13-15 and 21-24 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirem

## Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some\* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

19) ☐ Notice of Informal Patent Application (PTO-152)

17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 6

20) ☐ Other:

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## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The prior art statement filed 7/27/00 has been received and recorded.

### ***Response to Amendment***

2. The amendment filed 3/26/01 has been entered.

### ***Election/Restriction***

3. Applicant's election without traverse of Group II in Paper No. 5 is acknowledged.

Claims 1-12, 16-20 have been canceled.

### ***Claim Rejections - 35 USC § 112***

4. Claims 13-15, 21-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the limitation "the second pressure" in step (c ). There is insufficient antecedent basis for this limitation in the claim.

In claim 13, it's not clear whether "a first gas stream" as indicated on line 1 of the preamble is the same as "the first gas stream" in step (a) because the gas stream in step (a) should have the highest pressure and cannot be less than the 2nd pressure as indicated in the preamble.

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***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 13-15, and 23 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over SUN YU et al (US 6,176,971).

SUN YU et al, as shown on Fig. 2, 3, discloses a method of treating gaseous streams in the pulp mill comprising the steps of: (a) introducing the 1st gaseous stream (81) having a 1st pressure to the high-pressure inlet of the jet ejector (80), (b) introducing a 2nd gaseous stream (73) having a 2nd pressure to the low-pressure inlet of the jet ejector, and (c ) discharging a mixture of the two gaseous streams to form a 3rd gaseous

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stream at the 3rd pressure which is greater than 2nd pressure. Alternatively, the use of other gaseous stream of equivalent pressure in the pulp mill would have been obvious.

As for claims 14 and 23, these are taught in SUN YU et al col. 2, 6. Alternatively, the selection and recovery of other low-pressure steam, i.e. about 3.5-4.5 bar gage would have been obvious as mere treating other similar low-pressure steam. As for claim 15, the monitoring of the 3rd pressure based on the pressure of the 1st pressure by controlling the 1st pressure is inherently included in the steps of SUN YU et al. Alternatively, since the 3rd pressure of 3rd gaseous stream depends on the pressure of 1st and 2nd gaseous streams, it would have been obvious to monitor the 3rd pressure by controlling the 1st pressure.

8. Claims 21-22, and 24 are rejected under 35 U.S.C. 103(a) as being obvious over SUN YU et al.

SUN YU et al teaches the recovery of clean energy in the form of clean steam from the hot spent cooking liquor from a kraft pulping process by feeding hot spent liquor to an indirect heat exchanger (boiler 71) instead of to the flash tank (49). However, if quantity (volume/pressure) of energy/steam is more critical than quality (cleanness), it would have been obvious to select 2nd gaseous stream from a flash tank or other. In other word, as shown in Fig. 8 (prior art), if higher volume/pressure is needed in the contaminated steam to the process streams (105, 107, 109) or where clean steam is not

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critical), it would have been obvious to modify these streams by using a jet-ejector for pressurizing or increasing volume as taught by SUN YU et al. As for claim 24, this is taught in col. 2 or inherently included in the process of SUN YU et al due to similar treating steps. Moreover, the selection of the volume of 3rd gaseous stream or % higher than original stream depends on the selection of desired input ratio of the streams to the jet-ejector as shown on Fig. 3 and this would have been obvious to an artisan as optimizing operating conditions or result effective variables and the optimizing of result effective variables is considered as routine experimentation to determine optimum or economically feasible reaction conditions and would have been obvious to the skilled artisan. In re Aller, 105 USPQ 233.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 4,239,603 is cited to teach that volume of the gaseous stream leaving the jet-ejector is the sum of the volume the high-pressure steam to the jet-ejector and the low-pressure process vapor steam to the jet-ejector. This reference could have been included together with SUN YU et al to address issue of claim 24.

No claims are allowed.

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10. When filing a FAX in Group 1300, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for Draft Documents and other Communications with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dean T. Nguyen whose telephone no. is (703) 308-2053. The examiner can normally be reached on Monday-Friday @ 7:00-4:00 PM (ET).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stan Silverman, can be reached on (703) 308-3837. The fax phone number for this group is (703) 305-7718.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose tel. No. is (703) 308-0651.

dtn  
June 1, 2001

  
**DEAN T. NGUYEN**  
**PRIMARY EXAMINER**